CHAPTER - IV

PROFILE OF THE STUDY AREA

INTRODUCTION

About 45% of India’s garment exports are in the form of knitwear, and here the Tamil Nadu centre of Tirupur plays a pivotal role, generating as much as 90% of knitted garment exports – in other words, about 4% of India's total export trade. Known as 'T-Shirt City', the development of Tirupur is thus critical for the country's commercial prospects and progress towards sustainable development. The city's rapid growth can be attributed to the growth of textiles industry and vice-versa. This report aims at bringing in the various dimensions of such growth and the mutuality of industrial growth and the growth of the town Tirupur. The main challenge still remains for this internationally known Textile cluster, is how the city can maintain its reputation for competitiveness, while putting its operations on a sustainable basis and contributing to the society at large.

TAMIL NADU – A BRIEF

Tamil Nadu is bounded by Karnataka and Andhra Pradesh in the north and Kerala in the west. The waters of the Bay of Bengal and the Indian Ocean wash the coastal eastern and southern boundaries respectively. Point Calimere and Mudumalai wildlife sanctuaries define the eastern and western tips of the state while at the northern extreme is Pulicat Lake and at the southernmost tip is Cape Camorin or Kanniyakumari.
The state has an area of 1,30,058 sq. km and a population of over 62 million. Traditionally, the land has been divided into 5 major physiographic divisions - the Kurinji or mountainous region, the Mullai or forest region, the Palai or arid region, the Marudham or the fertile plains and the Neidhal or coastal region.

**CLIMATE**

Tamil Nadu has a tropical climate with little difference in temperatures in summer and winter. April and May are the hottest months with the mercury often soaring above the 40ºC mark. Coastal regions get uncomfortably warm and humid during these months but the nights are usually cool, thanks to the sea breeze that sets in during the afternoon. Summer temperatures are quite equable in the foothills of the Ghats.

**ECONOMY**

Tamil Nadu is one of the most industrialized States. At present it is the fifth largest economy in India. Given the high current economic growth rate, Tamil Nadu is poised to emerge as the third largest economy before 2005 A.D. The State Domestic Product is about Rs.856 billion and current exports are around Rs.153 billion. The main food crops are rice, pulses and oil seeds. Important commercial crops that are grown in Tamil Nadu include sugarcane, cotton, tea, rubber, cashew and coconut. Major forest products are timber, sandalwood, pulpwood and fuel wood while the minor products include bamboo, eucalyptus, rubber, tea, cashew, honey and ivory.
Improved port facilities and the effective use of electric power resources have helped industrial development in Tamil Nadu. Cotton ginning, spinning and weaving continue to be the major industries, followed by the production of automobiles, motorcycles, diesel engines, sugar, agricultural implements, fertilizers, cement, iron and steel, paper, chemicals, transformers and electric motors.

Tamil Nadu is rich in handicrafts; notable among them are handloom silk, metal icons, leather work, kalamkari (hand-painted fabric, using natural dyes), brass, bronze, copper wares, carved wood, palm leaf and cane articles. The state is an important exporter of tanned skin, hides, leather goods, cotton goods and yarn, tea, coffee, spices, engineering goods, tobacco, handicrafts and black granite.

Policy efforts at different levels by the Government have had their impact on the market and have boosted investor confidence. It's little wonder that Tamil Nadu is fast emerging as the 'Blue Chip' state for various investments. Tamil Nadu has done exceedingly well in attracting the FDI inflows - ranking fourth among the states in terms of value of the FDI investments and second in terms of the number of projects in the pipelines. Notably, Tamil Nadu has emerged as a leading state in South India in the area of attracting the FDIs.

**TIRUPUR – BANIAN CITY**

Tirupur popularly known as “Banian City” of the South India is located 60 kms away from Coimbatore city. It has come a long way from a small cotton-marketing centre with a few ginning factories to become a prominent cluster of small and medium
manufacturing enterprises gainfully engaged in the production and export of a range of knitted apparels.

Tirupur started with the production of low valued cotton hosiery items, mainly the under garments during the 1930’s. Knitting to this city was brought by Mr. Gulam Kadar in 1937. He established “Baby Knitting Industries” in Kaderpet area of Tirupur. It was followed by the establishment of second knitting unit by a woman, Mrs Chellammal, in the name of Chellemmal Knitting.

The growth of knitting industry in Tirupur can also be attributed to the failure of agriculture crops over a period of time and the availability of yarn, the basic raw-material for knitting from the nearby mills in Coimbatore. A few people also suggest that the dry climatic conditions in the area also helped the growth of this industry. Before knitting the agricultural labourers were already exposed to the hand-woven textiles because of khadi movement started by Mahatma Gandhi. That also helped them to get into to the knitting process of textiles. Started in 1930s as undergarment suppliers to domestic market, the number of knitting units reached around 450 in 1960.

The first export of knitted garments was made to the US and Ghana by Mohan Knits through a Bombay Merchant Exporter in 1972. However, it could not be sustained. In the later years, the entrepreneurial spirit and heavy competition for the domestic market forced the manufacturers to look beyond national boundaries. Thus, in 1980s a few units made sustained efforts to exports and succeeded. In 1987 the exports revenue of Tirupur was Rs.75 crores. Since then, it has not looked back and the exports
during the year 2004 touched a figure of more than Rs.5,000 crores contributing almost 80 percent of country’s exports in this sector.

Though Tirupur and its growth is unique in itself, there are quite a few industries in and around Tirupur. As has been pointed out earlier, the neighboring Coimbatore city is known for its machine tools, pumps, yarn and fabrics. The nearby districts like Karur and Erode are known for bed sheets, curtain cloth, mosquito nets and other made-up items. Karur district also has lots of processing units for natural dyeing. Another neighbouring district Udumalipet is a fertile area and grows coconut, aricanut, cotton and the like.

Of late, coir industry is also growing in this district. The nearby areas of Tirupur like Somanur, Avinashi, Palladam and Koduvai are also actively involved in Textile industry. The first three places have lot of power-looms and Koduvai focuses on handloom. The constraints faced by Tirupur in terms of infrastructure and labour problems are leading to the development of industrial activities in the nearby areas / districts. Some of the exporters have already started locating their expansion activities in udumalpet and Pollachi districts. The following figure 4.1 is given the Tamil Nadu State Map and figure 4.2 is explains the Tirupur District Map.
FIGURE 4.1
TAMIL NADU STATE MAP
FIGURE 4.2
TIRUPUR DISTRICT MAP

(Tiruppur District)
(Taluks)

Avalan
Palladam
Kangeyan
Dharapuran
Udumalaipettai

(Map Not to Scale)
Digital Map Source: TWAD Board, Chennai
Web Design: NIC, TNSC
COMPOSITION OF INDUSTRIAL GROWTH

Tirupur cluster comprises of around 5000 units which are involved in one or the other activities of Textile value chain. There are no precise data available as to the exact number of units in the different areas of value chain. However the growth of the Garment industry as a whole can be traced to the specialisation of different activities upto the stage of garmenting in Tirupur. Such specilisation has given the required cost advantage to compete in the international markets.

A notable feature of the industry in Tirupur is its organization in house hold workshops started mostly by owned funds of enterprising individuals. As the industry has developed as a faculty business, the entrepreneurs have developed highly specialized skills and aptitudes which have helped them to seize the quota generated opportunities of supplying to overseas demand. The following are the predominant features of Tirupur Textile Cluster:

- Cotton based knitted garments

- Majority of the units being in the proprietorship / partnership firm of organization controlled and directed by family management.

- Large number of units is involved in doing cutting, making and trimming knitted fabrics in pieces.

[Type text]
- Limited number of vertically integrated production units and a high degree of subcontracting relationship to knitting, processing and finishing operation.

From being the producers of basic knit garments for lower end of the domestic market, Tirupur knitwear cluster has today a diversified production range comprising, T-shirts, polo shirts, sportswear, sweat shirts, ladies dresses, children garment, nightwear, etc. This cluster reflects high degree of specialization in most areas including machinery supply besides every area of the manufacturing operation.

Innovative business development services such a pre-production checks, initial and during production checks, product consultancy, laboratory testing, sourcing assistance are provided by several enthusiastic entrepreneurs that help the industry to improve. There are fifteen active industry associations, which are playing commendable role in helping the firms by playing quasi-judiciary role to settle various inter and intra firm disputes besides procedural formalities, information assistance and the lobbying role with the government.

The important growth factors of this cluster are pro-active marketing, adaptation to latest technology and inter firm production arrangements. However, the major issues that concerns this industry for the sustainability of growth in the future relates to infrastructure and organization matters together with the challenges faced by the WTO impact.
Water scarcity, electric power supply and increasing pressure on the roads have put considerable strain on the growth of this cluster. With the firm increasingly moving towards higher value addition, quality and design inputs are becoming more crucial.

However, the industry has grown considerably over the last one decade by considerable joint initiatives by firms through associations and government support.

**INFRASTRUCTURE**

Infrastructure plays a vital role in the development of textile industry in Tirupur. Though it is still suffering from infrastructural bottlenecks, we may not be able to totally brush aside the development taken place in Tirupur town.

There are around twelve colleges and twenty four high schools in this town which provides the basic skill required for the human resources. Similarly, there are various banking companies operating in this small town. Almost all the top performing public sector banks and multinational banks like the ABN Amro are having branches in Tirupur. More over, developmental financial institutions like the SIDBI also operate from this town to facilitate industrial activities. There are five primary health centers and ten big hotels that are located in Tirupur. Some of these hotels have state of the art conference facilities, seminar halls and swimming pools. The construction activity has increased over the years and the real estate prices are sky-rocketing. There are also textile industry specific institutions functioning here. The Apparel Export Promotion Council (AEPC) has a full- fledged office in Tirupur which was looking after quota-
administration in the MFA era. National Institute of Fashion Technology (NIFT) has established its center to provide training in the area of fashion, design skills and the like.

Currently, various infrastructural development activities directed towards textiles industry have been initiated by the Government and other trade promotion bodies and industrial associations. Some of such initiatives are:

1. A water project to take care of both societal and industrial requirements with an investment of Rs.1,000 crores is underway through New Tirupur Development Authority.

2. A wind mill project with an investment of Rs.24 crores to generate megawatt power has been taken up under Tirupur Export Knitwear Industrial Complex.

3. In order to facilitate SMEs in dyeing and processing there exist eight common effluent treatment plants, out of which five are through New Tirupur development Corporation, a special purpose vehicle for infrastructure development. These five units also have reverse osmosis system for complete treatment of industrial effluents.

4. A bridge across the Noyyal river and a working women’s hostel are also coming up in Tirupur under the Industry Infrastructure Upgradation Scheme.
However, the phenomenal growth of the industry put lot of pressure for more infrastructure development. There is a wide mis-match between the rate of industrial growth of Tirupur and the growth of infrastructure. It appears that the infrastructural growth could not cope up with the demand of the industry.

**GROWTH FACTORS**

Tirupur's performance in Textiles originates from its performance in technology and the quality of its macro economic environment. It also derives much of its ascent from improved perception of its public service. Buyers from 35 countries frequently visit Tirupur. Tirupur can deliver customized samples in less than 12 hours; half a million pieces in a matter of days. 56% of India's total knitwear exports come from Tirupur. This has been recognized in the Export Import Policy, 2002 - 07 of Government of India which conferred the status of 'Town of Export Excellence' to Tirupur.

The rich availability of Raw materials, being in close proximity to Coimbatore which is a major centre of cotton spinning industry in the Country makes Tirupur being able to access its basic raw materials quickly and as and when required; the strong entrepreneurial skills and personalized management contributes to efficient management of of negotiations and direct control operations causing cost effective competitiveness of the Industry; quick delivery and quality products add dimension to the Tirupur's prowess as a centre to outsource excellent products.
INCENTIVES & RESOURCES

INCENTIVES FROM CENTRAL GOVERNMENT

1. Considering the felt need to upgrade technology in different segments of the textile industry, Government of India has launched a Technology Upgradation Fund Scheme (TUFS) for Textile and Jute Industries, w. e. f. 1.4.1999. for a period of 5 years, i.e. up to 31st March 2004. The period of implementation of TUFS has been extended up to end of the 10th Five Year Plan i.e. 31.03.2007. The main feature of the scheme is that it provides a reimbursement of 5% point on the interest charged by the lending agency on a project of technology upgradation in conformity with this scheme.

2. Establishment of Powerloom Service Centers which act as a one stop shop for training to weavers, testing facilities, design development, technical consultancy and dissemination of information about modernization of looms.

3. Setting up of Computer Aided Design Centers. The Government has announced a Group Insurance Scheme with a view to provide a social security cover to the workers of the powerloom sector in association with the Life Insurance Corporation of India.

4. Recently the Government has announced a Group Work shed Scheme under which, subsidy for construction of work shed would be limited to 25% of the unit cost of...
construction subject to a maximum of Rs.80/- per. sq. ft. The maximum permissible subsidy per beneficiary shall be restricted to Rs.11.52 lakhs to cover an area of 14400 sq.ft @ Rs.80/- per. sq. ft., for both powerloom sheds and preparatory units. The remaining equity requirement for the project would be raised by the beneficiary by way of promoters’ contribution (10%). Balance amount may be raised as loan from financial institutions like banks, the SFCs or the HUDCO, or may be contributed by the beneficiaries from own sources. Any escalation due to delays or inflation would have to be borne by the beneficiary.

**INCENTIVES FROM THE STATE (TAMIL NADU) GOVERNMENT**

The Tamil Nadu Government has framed a textile policy for the state in 1998 and provides support to the Textile sector. The following measures were announced as part of the same for the knitwear and garment sector:

1. Government will encourage the growth of this industry by providing necessary physical infrastructure. Government will also encourage setting up of spinning units dedicated to the production of hosiery yarn.

2. As a forward linkage to the powerloom sector Government will set up Garment Export Parks(s) in the state to encourage the powerloom sector to produce fabrics to meet the requirements of garment exporters.

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3. Production of blended powerloom fabrics in fibres other than cotton will be encouraged by funding design and development efforts by recognized institutions, particularly, silk fabrics for export.

4. Production of industrial fabrics including filter fabrics, canvas geo-textiles, non-wovens and the like will also be encouraged by funding design and development efforts by recognized institutions.

However the major focus of the State Government remains on the Handloom sector. Hence there are no visible incentives that can be traced for Tirupur.

**ROLE OF SUPPORT INSTITUTIONS**

There are number of local representative institutions and support bodies, as well as initiatives on the part of the State, that have had an important impact on the development of the knitwear sector in Tirupur. There are, for example, various macro support strategies for small scale industry in India which also apply to this sector. These provide tax benefits and subsidized credit. There is, however, no empirical evidence on Tirupur of the impact that these SME benefit packages have provided to local small producers.

Their continued importance, though, is partially reflected in the practice of firms splitting up at reaching certain size thresholds. In terms of more targeted institutional
support to the local knitwear industry, a few organisations stand out: the Textiles Committee under the Ministry of Textiles, Apparel Export Promotion Council (AEPC); the South Indian Hosiery Manufacturers’ Association (SIHMA), more dynamic, the Tirupur Exporters Association (TEA) that represents the city’s knitwear exporters; and the Knit Cloth Manufacturer’s Association (KNITMA).

The Textiles Committee's main objective is to ensure the quality of textiles and textile machinery both for internal consumption and export purposes. The Textiles Committee, as corollary to its main objective of ensuring the quality of textiles and textiles machinery has been entrusted with the following functions:

1. To undertake, assist and encourage, scientific, technological and economic research.
2. To establish standard specifications for textiles, textile machinery and the packing materials.
3. To establish laboratories for the testing of textiles and textile machinery.
4. To provide training in the techniques of quality control.
5. To provide for the inspection and examination of textiles and textile machinery.
6. To promote export of textiles.
7. To collect statistics and
8. To advise the Central Government on all matters relating to textiles and textile machinery and the like.

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In Tirupur, the Textiles Committee has created an excellent impact on the industry through continuous and timely interventions. It is involved in almost all the value chain activities and maintains relationship with all the Industrial Associations. It is seen by the Industry as a dependable and most active

**GOVERNMENT BODY BY THE TIRUPUR EXPORTERS**

The Apparel Export Promotion Council (AEPC) acts both in a regulatory as well as a promotional role in the local knitwear industry. The AEPC was set up in 1978 by the union government to stimulate export growth and act as advisor to buyers, exporters and government. It had in the mid 1980s over 6,000 members who were all exporters, and had set up regional offices in various locations, including Tirupur, to provide support at the doorstep. In Tirupur, the AEPC has a dual role: to administer the export of garments via the management of a quota system and to deal with the implications of bilateral trade agreements in force with importing countries and secondly to promote the export of Indian garments. The AEPC also sponsors buyer / seller meetings, organises trade delegations, individual sales tours and sets up market survey teams. The council collects trade data, both locally, and is particularly active in seeking out markets in countries where India’s exports are not quota and from abroad bound (such as Eastern Europe, Latin America, and East Asia).

The Tirupur Exporters Association (TEA) is a dynamic association, formed in the year 1990 with 500 direct members. The TEA offers lot of value added services to its member like technical skill upgradation through NIFT-TEA, arranging contact with
buyers through IUF, disseminate market information government policy changes through their bulletin and Email.

The achievements of the TEA includes establishing a inland container depot India Knit Fair Complex for conducting trade fairs, Tea public school for fashion institute by signing a Memorandum of Understanding (MoU) with the NIFT. Some of the special assignments taken up by them are:

- Apparel park of 65 units in a 175 acre land

- Promotion of a common brand to gain differentiation advantage

- Strengthening and widening the road commonly NH - 47 & NH - 67 for carry transportation and movement of goods.

South India Hosiery Manufactures Association (SIHMA) is one of the oldest association established in 1951 with 60 export members and 1200 domestic members assisting them to get financial assistance from the banks and financial institutions. On the procedural front, assistance is also provided in getting the registration certificate of small-scale industry, RBI Code, exports import licence issued. It also files legal suits in courts and represents on behalf of their members. SIHMA offered various HRD training programmes in the following areas:

- Women entrepreneurship training through SISI
- CAD course for exporters

- Skill upgradation courses for merchandisers in pattern making, quality control

- Facilitating ISOP certification through BDI providers Tirupur Dyers Association is established in the year 1985. Currently, operating with 750 members, assisting them through advocacy on policy issues. It also acted on a principal body in setting up of eight common effluent treatment plants. It has coordinated with Textiles Committee for various Skill upgradation programmes for the capacity building of its members.

**LEADING INDUSTRY ASSOCIATIONS**

The Industry Associations and Institutions have rendered lot of services in the development of this industry. The leading Industry Associations and Institutions in Tirupur are:

- Tirupur Exporters Association (TEA)

- South India Hosiery Manufacturers Association (SIHMA)

- Tirupur Export Knitwear Manufacturers Association (TEKMA)

- Tirupur Dyers Association (TDA)

- Tirupur Screen Printing Association (TSPA)

- Tirupur Narrow Tape Manufacturers Association (TNTMA)
- Tirupur Cloth Stitching Section Association (TCSSA)

- Indian Hosiery Yarn Mills Association (IHYMA)

- Tirupur Cotton Merchants Association (TCMA)

- Tirupur Merchants Association (TMA)

- Coimbatore District Powerloom Cloth Dealers Association (CDPCDA)

- Tirupur Powerloom Association (TPA)

- Tirupur Hosiery Yarn Merchants Association (THYMA)

- The Knit Compactors Association (KCA)

- South Indian Imported Machine Knitters Association (SIIMKA) and

- Knit cloth Manufacturers Association (KNITCMA)

**ISSUES OF GOVERNANCE**

The issue of governance for Tirupur and the Textile Industry revolves around the growth pattern of this town over a period of time. The discussions with some of the social activists in the town shows that the growth of Tirupur is mainly because of a community oriented growth. Any kind of Stereo type interventions which have a
mismatch with the community expectations were found to be futile. This may be one of the reasons because of which the industry associations have a strong governance role in shaping up the development of the city.

The Industry Associations are contributing a lot for the social development including provision of basic amenities like water. On the social front, the industry provides large scale employment to women which has given opportunity for women from other districts and neighbouring Kerala State to migrate to this place. In the garment industry, due to the nature of job and social acceptance, it is found that women are more suitable on the shop floor. However, capacity utilization of these garment units by running three shifts becomes a problem with the increase in the number of women who have the household responsibility to discharge.

Some of the governance issues which are hampering the growth of the industry and quality of life are as follows:

1. Lack of health centres and hospitals for the people. Though, there are primary health centres which can provide basic medical facilities, this becomes important in a town where the working population is very high and incidence of industrial accidents are high.

2. The growth in the industry demands specialized training institutes to provide advanced skills. Currently, though there are institutions in the nearby areas like Coimbatore, the need for establishment of skill development institutions with requisite exposure on IT advancements should be looked at.
3. Commuting within the city is one of the major problems reducing the quality of life of people. Though, the industrial associations are trying to address this problem, it should be remembered that the associations are mainly to develop business rather than providing only social services. Hence the local Government and the State Government should take up this issue on a priority basis. This issue has been raised in various platforms for year together rather than any centre action.

4. As the number of working women population is high in this town, community centres and hostels are required especially in the wake of increasing Non-Tariff Barriers in the International Trade on social security measures. Currently, the individual units are trying to provide this kind of support which is not adequate.

**ENVIRONMENT ISSUES**

to reduce the consumption of firewood

Industrialization and urbanization are the two sources of chemical agents which, cause environmental *degradation*. Industrialization has rapidly developed, which plays both a beneficial and harmful role in the environment. One of the most significant challenges for the Tirupur textile industry today is water. Textile production, particularly dyeing and bleaching, can be water intensive and can generate large quantities of effluent. Tirupur is in a dry, water-scarce region, and the rapid expansion of the textile industry has taken place in an unplanned manner, with no associated development of supporting infrastructure or institutional capacity. As a result, the
growth has led to the depletion of groundwater reserves and a serious deterioration in environmental quality of both surface and ground water.

Typical water consumption in Tirupur is around 200 to 400 litres / kg of finished product, compared with the international norm of 120 to 150 litres / kg. The city does not have a reliable piped water supply, and private water suppliers abstract ground water and supply it to the textile industry using tankers. Ground water in neighbouring areas has been decreasing and becoming contaminated. This has forced the tankers to travel even-larger distances to draw the water. Lack of adequate water supply have inhibited growth and slowed down the flow of new investments. Most of the bleaching and dyeing units in Tirupur are located in clusters along the banks of the River Noyyal and River Nallar, into which they were, 26 until recently, discharging effluent. The two rivers are natural drainage courses that only carry water in the monsoon period. During the remainder of the year, they only carry industrial effluents that stagnate in the riverbeds and percolate into the groundwater.

As a result, the groundwater quality around the cluster of bleaching and dyeing units is polluted to such a level that it is unfit for domestic, industrial and agricultural activities. Estimated wastewater generation from the nine industrial clusters in Tirupur is around 102 million litres per day. The bleaching and dyeing process are the main causes of pollutants which include caustic soda, hydrochloric acid, sodium hydro sulphate, hypochlorite and peroxides.

[Type text]
Due to public pressure, the court intervened and closed the dyeing units several times since 1997. In June, 2005, this has taken an ugly turn, when the Chennai High Court ordered complete closure of the dyeing units and slapped crores of rupees of compensation to clean the environment on the dyeing units. Such an action has created a furore in the whole textile industry as this would lead to more problems when the demand for the knit-wears is increasing due to MFA phase-out. A Resource Flow Analysis (RFA) was undertaken by the Faculty of Environmental Studies, University of Madras, for the town of Tirupur, which stood as an example of how a Regional Resource Flow Analysis could be effectively used. Water is scarce in the area and the wet processing of textiles has rendered the ground water unusable. A large quantity of salt is used in the dyeing process and the process wastewater (90 million litres per day) is highly saline and is contaminated with a variety of chemicals.

As there is hardly any source of fresh water nearby, water is brought in by trucks from ground water sources (which are yet to be polluted) as far as 50 Kms away at an enormous cost. A massive US $ 30 million project is under way to treat the wastewater at Central Effluent Treatment Facilities. After such expensive treatment, the water will still be unusable, as the facility does not include any system for desalination of the wastewater.

A detailed Resource Flow Analysis was carried out for the town. Only when the figures were aggregated did the industrialists realize that they were collectively
spending over US$ 7 million annually on buying water and in addition, the annual maintenance cost of the effluent treatment plant would be an enormous burden. The aggregate figures immediately showed that water could be recycled profitably. On the basis of the study, a private entrepreneur developed a water recycling system, which could be installed in each dyeing unit. The system used the waste heat from the boilers already working in the dyeing units for the recycling process. This is a relatively low cost system, which is gaining popularity in the town. The second outcome of the study was that the study highlighted the fact that the calorific value of the solid waste (garbage) was high as it contained large quantities of textile and paper wastes. This could be used effectively to partially replace the 500,000 tones of scarce firewood being used in the town (there is grave concern over rapid deforestation in India). Since the use of the firewood is distributed over nearly 1200 points, it was not obvious that such large quantities of firewood were being used. The possibility of setting up a central steam source (needed by some of the industries) is also under serious consideration in order to reduce the consumption of firewood

INNOVATIONS ACHIEVED AND PLANNED

The cooperative Strategies adopted by the industry, Trade Promotion Organisations, Financial Institutions and the Government have led to various innovative measures. The creation of Special Purpose Vehicle (SPV) for huge infrastructural project is an excellent example of innovativeness in the development of Tirupur. There are also few instances of innovation that are noticed. It has been continuously reiterated that entrepreneurial skills and technical skills are important factors leading to the success of this industry in Tirupur. To imbibe these qualities, an innovative approach
has been taken by one of the institutions, Kumaran Kalvi Kazhagam which runs Vivekananda Vidyalaya. This school gives the exposure to the school children about the various aspects of textile industries and the need for more entrepreneurs in this industry from the sixth standard of the school. In fact, such a creative initiative can sensitise the young brains about the industry.

Access to Venture Capital Finance was not a major problem for Tirupur SMEs till 1990s wherein the activities were carried out through families with their common fund. However, the expansion of the firms has necessitated the need for suitable sources of finance for the industry. National Small Industries Corporation and Small Industries Development Bank of India are in the forefront for venture capital financing. The following are some of the important schemes of financing.

**NATIONAL SMALL INDUSTRIES CORPORATION (NSIC)**

Bill Financing Bills drawn by small scale units for the supplies made to the reputed and well established enterprises and duly accepted by them will be financed/discounted by the NSIC for a maximum period of 90 days.

**WORKING CAPITAL FINANCE**

Finance for augmenting working capital of viable and well managed units, on selective basis in case of emergent requirements, to enable them to payoff their
purchases of consumable stores and spares and production related overheads particularly electricity bills, statutory dues and the like.

**EXPORT DEVELOPMENT FINANCE**

Finance for export development to export oriented units for meeting their emergent requirements. Pre and post shipment finance shall also be provided to such units at usual terms and conditions.

**EQUIPMENT LEASING SCHEME**

The object of the Leasing Scheme is to assist SSI Units to procure industrial equipment for modernisation, expansion and diversification of their industries.

**SMALL INDUSTRIES DEVELOPMENT BANK OF INDIA (SIDBI)**

The SIDBI was set up by an Act of Parliament, as an apex institution for promotion, financing and development of industries in small scale sector and for coordinating the functions of other institutions engaged in similar activities. It commenced operations on April 2, 1990. The SIDBI extends direct / indirect financial assistance to the SSIs, assisting the entire spectrum of small and tiny sector industries on All India basis. The range of assistance comprising financing, extension support and promotional, are made available through appropriate schemes of direct and indirect assistance for the following purposes:

- Setting up of new projects
- Expansion, diversification, modernization, technology upgradation, quality improvement, rehabilitation of existing units
- Strengthening of marketing capabilities of the SSI units.
- Development of infrastructure for the SSIs and
- Export promotion.

**DIRECT ASSISTANCE SCHEMES**

The SIDBI directly assists the SSIs under Project Finance Scheme, Equipment Finance Scheme, Marketing Scheme, Vendor Development Scheme, Infrastructural Development Scheme, ISO-9000, Technology Development & Modernisation Fund, Venture Capital Scheme, assistance for leasing to the NBFCs, the SFCs, the SIDCs and resource support to institutions involved in the development and financing of small scale sector.

These Schemes are mainly targeted at addressing some of the major problems of SSIs in areas such as high tech project, marketing, infrastructural development, delayed realisation of bills, obsolescence of technology, quality improvement, export financing and venture capital assistance.
INDIRECT ASSISTANCE SCHEMES

Under its indirect schemes, the SIDBI extends refinance of loans to small scale sector by Primary Lending Institutions (PLIs) viz. the SFCs, the SIDCs and Banks. At present, such refinance assistance is extended to 892 PLIs and these PLIs extend credit through a network of more than 65,000 branches all over the country. All the Schemes of the SIDBI both direct and indirect assistance are in operation in all the States of the country through 39 regional / branch offices of the SIDBI.

PROMOTIONAL AND DEVELOPMENT ACTIVITIES

The SIDBI is actively involved in promoting tiny and small scale industries by means of its promotional and developmental activities through suitable professional agencies for organising Entrepreneurship Development Programmes, Technology Upgradation and Modernisation Programmes, Micro Credit Schemes and assistance under Mahila Vikas Nidhi to bring about economic empowerment of women specially the rural poor by providing them avenues for training and employment opportunities.

MAJOR DEVELOPMENTS

NETAJI APPAREL PARK

Netaji Apparel Park, established along the Avanashi – Perumanalloor National High Way, in a combined effort by the Government and the Tirupur Exporters Association, rolled of its production from January 2005 onwards. In addition to an
investment of Rs.92.00 crores on infrastructure and factory buildings on this park about Rs.150.00 crores is being invested on machinery. There are 46 plots of 1.8 acres each and 8 plots at 3.6 each with excellent roads of 60 feet breadth for easy transportation of containers. Infrastructure facilities like water supply, drainage sewerage, training center, display hall, production facilities of international standards have been ensured in addition to an exclusive captive power plant. The Park has 53 companies engaged on knit-wear production alone. A standard unit here produces 7500 pieces per day, for a total value of $ 22,500. If all the units are engaged for 240 days a year, the annual turn over will be Rs.1,500 crores. Wet processing like dyeing and printing are excluded from the park. Hence the need for Common Effluent Plant has been done away with. Rain water harvesting along with suitable arrangements for sewerage treatment has been provided for. A green belt is developed through 2500 avenues of trees, besides lawns, flowering bushes and plants. The park currently enrolls 10000 workers.

TIRUPUR EXPORT KNITWEAR INDUSTRIAL COMPLEX (SIDCO INDUSTRIAL ESTATE)

Tirupur Export Knitwear Industrial Complex was established in 1992 at Mudalipalayam village in a space of 100 acres of in the outskirts of Tirupur town. In this 189 sheds were built in 4200 square feet area. The campus has Knitting, Garment Production and labeling units. More than 10000 workers are employed in the various units of the campus. It is a specialized garment export zone. The annual turnover is an estimate of Rs.650 crores. The complex has Drinking water facilities; Road access and dispensary
services. The complex is preparing to avail the natural energy of wind mill in future. The proposal of construction of a Hostel for the women worker’s is under way.

NEW TIRUPUR AREA DEVELOPMENT CORPORATION LIMITED (NTADCL)

The NTADCL was formed under public and private partnership to carry out water supply and sanitation project at an outlay of Rs.1,023 crores. It is to cater to the water needs of the industries as well as the public. The NTADCL also takes care of the drainage system of the Tirupur municipality.

INDO- ITALIAN CHAMBER OF COMMERCE

The AEPC and Italian Chamber of Commerce Industry (ICCI) have signed a Memorandum Of Understanding (MoU) to enhance the bilateral trade between the countries by working for the maintenance of free trade and fair market access principles, promoting strategic alliances between products of yarns, fabrics and clothing in India and Italy and by taking advantages of trade fairs organized in the two countries, grouping manufacturers and dealers in exclusive needs in both the countries for show casing each others manufacturing capabilities and market demands.

The MoU also aims at promoting higher level of investments in the textile and clothing sector by undertaking a study of the value added chain in the textile and clothing sector in both the countries with a view to identifying possibilities of foreign [Type text]
investment, recommending areas for entering into joint ventures, undertaking regular investment promotion missions and compiling a compendium of procedures followed by each countries for approval of foreign investments in apparel sector.

TIRUPUR INDUSTRIAL FEDERATION (TIF)

Tirupur Industrial Federation (TIF) is a net-work of four major associations: Computer Embroidery Owners’ Association, Imported Knitting Machine Owners’ Association, Compacting Machine Owners’ Association and Raising Machine Owners’ Association. All major sub-contract companies, otherwise known as “Job - work companies” are members of this federation. TIF strives to bridge the gap of inequality among the companies that have the upgraded modern facilities but get fewer orders.

Recently TIF was granted Rs.6.27 lakh by the Department of Small-scale Industries to establish a “Sub-contract Exchange Scheme” at Tirupur. The data-base of all Sub-contract units including the availability of machines will be updated on a daily basis and orders received from Buyers and Major Exporters will be distributed accordingly. The Government has formally sanctioned the Sub-contract Exchange Scheme at Tirupur. The new office for TIF located at Knit-Compacting Association building inside Binny Compound will handle the sub-contract exchange scheme.

J. S. APPAREL PARK

J. M. Promoters have initiated an entirely private 4 acre Apparel Park called J. S. Apparel Park, in Thirumurugan Poondi of Avinasi Main Road, situated at 10 kms. from Tirupur railway station. The park will have 23 units in addition to a Mess, Seminar Hall,
36 ft. roads and exclusive water facility. Each unit will occupy 4200 sq. ft land and will have a 6000 sq. ft building, at a cost of Rs.50 - 70 lakh. The park will be functional from Jan. 2007 onwards. The Netaji Apparel Park (NAP) and Tirupur Export Knitwear Industrial Complex (TEKIC) have donated 2 acres and 2600 sq. ft of land respectively for the construction of hostels. The former will accommodate 1000 women and the latter 500 women.

CODE OF CONDUCT AND OTHER DEVELOPMENTS

Since 2003, the Fair Wear Foundation has been actively promoting respect for labour standards in Tirupur, a garment-producing hub in Southern India. In cooperation with others the FWF has been trying to set up a social dialogue platform to discuss and improve the application of labour standards in the exporting firms of Tirupur. An important impediment to the development of the platform was the reluctance of the employers organisation the TEA to give its full support. To move the initiative forward, the ILO was requested to take the lead in this project and to apply the ILO’s Factory Improvement Programme in close consultation with the TEA.

The ILO Factory Improvement Programme (FIP) is a multi-supplier training programme for the development of local factories' capacity in industrial relations, health and safety and working conditions, linking to areas of productivity and quality. The ILO is going to implement the program in Tirupur with the twin aim of raising factories capacities to comply with International Labour Standards (ILS) and increasing their productivity, competitiveness and profitability. The program involves small groups of factories for a six to nine month training and factory - level consulting / improvement
program. Short training sessions for each module are followed by factory visits and consulting in the specific needs of individual factories.

The Women Development Cell (WDC) aims to facilitate and to enable the poor downtrodden and oppressed women towards their socio, economic, cultural and political empowerment. One of the core activities of the WDC is the promotion of economic initiatives through the Self Help Groups (SHGs).

The Tirupur People’s Forum for Protection of Environment and Labour rights (TPFPEL is selected as synonym) emerged as a response to the growing labour rights violation specifically the exploitation of the migration workers, women workers and the child labour in the Tirupur garment and textile industries and in response to the continued eroding of the environment due to the industrial and other pollutants of Tirupur.

The forum is constituted with the consensus of the organizations that are involved in promotion and protection of workers rights, child rights and protection of environment rights in Tirupur as well with the organizations from the sourcing areas.

**CIVIC AMENITIES TO TIRUPUR**

The Tamil Nadu government has upgraded Tirupur Municipality into Municipal Corporation, covering additional areas in its outskirts and opening up the scope of a larger budget and a bigger administration. The Chennai based consultancy firm, Wilbur Smith Associates has prepared a city corporate-cum-business plan at an outlay of Rs.458 crore for Tirupur Corporation.

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Traffic management and road enhancement works in the congested town will be accorded top priority with a proposed allocation of Rs.263 crore. While suggesting a slew of bridges to connect fragments divided by the Nooyal river and the railway track at an outlay of Rs.145 crore, the proposal envisages road improvement works on bus routes and other link roads at a cost of Rs.25 crore. A pedestrian subway at Rs.65 lakh and a parking facility for light motor vehicles at Rs.50 lakh besides a multi-storied parking facility near the railway junction are also in the pipe-line. The extension of underground sewerage network to the unserved areas will be undertaken at an outlay of Rs.62.78 crore. Provision of public conveniences for slums will be allocated Rs.22.88 crore.